

Basic Course Information

Semester	Spring 2015	Instructor Name	Rick Castrapel
Course Title & #	Math 119 Elementary Statistics	Email	rick.castrapel@imperial.edu
CRN #	20382	Webpage (optional)	spaces.imperial.edu/rick.castrapel
Room	2723	Office	2766
Class Dates	Feb 18 to Jun 12, 2015 Drop deadline: May 16, 2015	Office Hours	MW 3-4 pm, TR 2-3 pm or by appointment
Class Days	Monday, Wednesday, Friday	Office Phone #	760-355-6505
Class Times	10:00am - 11:15am	Office contact if student will be out or emergency	Silvia Murray 760-355-6201 or Ofelia Duarte 760-355-6155
Units	4 units		

Course Description

Graphical representation of statistical data, calculations, and uses of various averages, measures of variability, introduction to probability, probability distributions, confidence intervals, sample size determination and hypothesis testing, ANOVA, linear regression and Chi-square analysis. Students will learn to use technology to find confidence intervals, test statistics, regression lines, and to produce graphics. This course also provides supervised practice in the appropriate use of technology designed to assist students in calculations required in beginning statistics. (CSU, UC)

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Determine and interpret a confidence interval for a population mean. (ILO2, ILO4)
2. Apply statistical inference to conduct formal significance tests concerning single populations. (ILO2)
3. Demonstrate the ability to use technology in computing and interpreting basic descriptive or inferential statistics. (ILO2, ILO4)
4. Apply techniques of linear modeling to explore the relationship between two numerical variables. (ILO2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Distinguish the various ways of organizing, displaying, and measuring data.
2. Derive the numerical relationship that exists between bivariate data sets.
3. Demonstrate an understanding of the theory of probability and proficiency in solving problems of this nature.
4. Compute and interpret expected values and variance, and learn about the binomial distribution for discrete random variables.
5. Compute and interpret expected values and variance, and learn about the normal distribution or continuous random variables.
6. Examine the joint probability structure of two or more random variables and understand the limiting behavior of the sum of independent random variables as the number of the sample becomes larger.
7. Use the various types of distributions that are derived from the normal distribution.
8. Calculate and interpret confidence intervals for a population mean to show how probability connects to this type of statistical inference.
9. Use hypothesis testing as a formal means of distinguishing between probability distributions on the basis of random variables generated from one of the distributions.
10. Compare the means of the data from experiments involving more than two samples, including the single factor analysis of variance (ANOVA).
11. Fit a straight line to the given data in graphical form.
12. Make use of Chi-square distributions to analyze counts.

Textbooks & Other Resources or Links

1. Triola, Mario (2013). Elementary Statistics (Second California Edition). Pearson. ISBN10: 1-256-93644-8. ISBN 13: 1256989851
2. MathXL subscription. See the attached information.

Course Requirements and Instructional Methods

1. Exams or Tests: There will be five tests and there will be no makeup exams given. The lowest score of the five tests will be disregarded. Please refer to calendar for dates.
2. Final Exam: The final will be given during the last day of classes. A score of 0 will be given if the final is missed. Please refer to calendar for dates.
3. Homework: The purpose of homework is to provide students with sufficient practice to master all topics and to do well on tests and the final exam. Homework is assigned and completed online through MathXL. Homework deadlines are set to assure that you complete the homework before the test on covered material. **Do not ask for an extension to the MathXL homework deadline. There is no point in studying for a test after you have already taken it.**
4. There are four labs which take place in the Math Lab bldg 2500.
5. There will be a team project. Details will be posted on Blackboard.
6. There will be no extra credit. Students must learn the material to pass this course.
7. It is utmost important that students review the material to do well on exams. Students are encouraged to form study groups to meet regularly to keep up with labs and homework and to study for tests.
8. **Calculator: A TI-83 plus or TI-84 plus is essential for your success in this course.** You may rent a TI-83 plus from the Math Lab for \$10 for the semester. Go first to the cashier in Bldg 10, then take your receipt to the Math Lab to get your calculator.

Course Grading Based on Course Objectives

The student's grade will depend on the following areas (not on total points):

Semester Tests:	40%	There will be 5 tests and there will be no makeup exams given. The lowest scoring test will be disregarded.
Labs	20%	The labs will take place in the Math Lab Bldg 2500. These are not optional.
Project	10%	Team project on a hypothesis test.
Final Exam:	20%	The final will be given on the last day of the semester. A score of 0 will be given if the final is missed.
Homework	10%	Homework is done online via MathXL. See the attached information.
Extra Credit:	0%	There is no extra credit. Students must learn the material to pass this course.

All grades are calculated by using the standard scale of: A = 100---90% B = 89---80% C = 79---70% D = 69---60% F = 59% and below

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.

- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as ‘excused’ absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- Plagiarism is taking and presenting as one’s own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to ‘cite a source’ correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Help – Discretionary Section and Language

- Blackboard support center: <http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543>
- Learning Labs: There are several ‘labs’ on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Study Skills Center (library). Please speak to the instructor about labs unique to your specific program.
- Library Services: There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S

office is located in Building 2100, telephone 760-355-6313, if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see <http://www.imperial.edu/students/student-health-center/>. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at <http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/>

Imperial Valley College Course Syllabus – Math 119 20382 Elementary Statistics

Anticipated Class Schedule / Calendar

Math 119 Spring 2015 Tentative Schedule				
Date	Text	Event	Notes	
02/18/15	1-2,1-3		Introduction to Statistics	
02/20/15	1-4,1-5		Introduction to Statistics	
02/23/15	2-2, 2-3		Summarizing and Graphing Data	
02/25/15	2-4,2-5		Summarizing and Graphing Data	
02/27/15	3-2, 3-3, 3-4		Statistics for Describing Data	
03/02/15	3-2, 3-3, 3-4		Statistics for Describing Data	
03/04/15		Lab 2500	Measures	
03/06/15		Test 1	Chapters 1, 2 and 3	
03/09/15	4-1, 4-2		Probability	
03/11/15	4-3	Craps	Addition Rule, Examples: Craps	
03/13/15	4-4, 4-5		Multiplication Rule	
03/16/15	4-6		Counting	
03/18/15	5-1, 5-2		Discrete Probability Distributions	
03/20/15	5-3, 5-4		Binomial Distribution	
03/23/15		Lab 2500	Sampling	
03/25/15		Keno	Examples of Other Discrete Probability Distributions	
03/27/15		Test 2	Chapters 4 and 5	
03/30/15	6-1, 6-2		Introduction to Normal Distribution	
04/01/15	6-2, 6-3		Normal Distribution	
04/03/15	6-4		Sampling Distributions and Estimators	
04/06/15			Spring Break	
04/08/15				
04/10/15				
04/13/15	6-5		Central Limit Theorem	
04/15/15	6-5, 6-6		Normal Distribution	
04/17/15		Lab 2500	Normal Distribution	
04/20/15	7-1, 7-2		Estimating a Population Proportion	
04/22/15	7-3		Estimating a Population Mean	
04/24/15	7-4		Estimating a Population Standard Deviation or Variance	
04/27/15		Test 3	Chapters 6 and 7	
04/29/15	8-1, 8-2		Basics of Hypothesis Testing	
05/01/15	8-2		Basics of Hypothesis Testing	
05/04/15	8-3		Testing a Claim About a Population Proportion	
05/06/15	8-4	Projects Assigned	Testing a Claim About a Population Mean	
05/08/15		Lab 2500	Hypothesis Testing	
05/11/15	8-5		Testing a Claim About a Population SD or Variance	
05/13/15		Projects	Examples	
05/15/15		Test 4	Chapter 8	
05/18/15	9-1, 9-2		Inferences about two proportions	
05/20/15	9-3		Inferences about two means: independent	
05/22/15	9-4		Inferences about two means: dependent	
05/25/15		Holiday	Memorial Day	
05/27/15	10-1, 10-2		Linear Correlation	
05/29/15	10-3		Regression	
06/01/15	11-3		Contingency Tables	
06/03/15	12-2		ANOVA	
06/05/15		Test 5	Chapters 9, 10-2, 10-3, 11-3, 12-2	
06/08/15			Project Reports Review	
06/10/15	Final Exam		Comprehensive Final Part 1	
06/12/15	Final Exam		Comprehensive Final Part 2	



How to Register and Enroll in Your Course

Welcome to MathXL! Your instructor has set up a MathXL course for you.

The course name is: Math 119 Sp'15 20382 MWF 10:00-11:15 MWF

It is based on this textbook: *Triola: Elementary Statistics, Second California Edition*

To join this course, you need to register for MathXL and then enroll in the course.

1. Registering for MathXL

Before you begin, make sure you have the access code that comes with your MathXL Access Kit.

To register or buy access, go to www.mathxl.com, click the **Student** button in the Register section, and then follow the instructions on the screen.

2. Enrolling in your instructor's course

After registering, log in to MathXL with your username and password. To enroll in this course, enter the following Course ID:

The Course ID for your course is: XL1T - Q1H3 - 6020 - 4D12

Need more help?

To view a complete set of instructions on registering and enrolling, go to www.mathxl.com and visit the Tours page.